

# 2015 Consumer Confidence Report

Water System Name: Varian Ranch Mutual Water Company Report Date: January 2016

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2015 and may include earlier monitoring data.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Type of water source(s) in use: Groundwater wells

Name & general location of source(s): Well 03 and Well 01. The wells are located near Orcutt Road and Varian Circle.

Drinking Water Source Assessment information: A source water assessment was conducted for Well 03 in November 2001. Authorization to use the restored Well 01 was received in October 2008. No contaminants have been detected in the water supply, however the source is considered most vulnerable to the following activities: Grazing

Time and place of regularly scheduled board meetings for public participation: Water board meetings are conducted the 3<sup>rd</sup> Wednesday of the odd numbered months starting at 7:00 p.m. at the Varian Ranch community center.

For more information, contact: Rod Curb Phone: (805) 440-3831

## TERMS USED IN THIS REPORT

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Variances and Exemptions:** State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND:** not detectable at testing limit

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (µg/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

**The sources of drinking water** (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Contaminants that may be present in source water include:**

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe to drink**, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent.** The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

Microbiological Contaminants	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) **	NA	NA	NA	NA	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) **	NA	NA	NA	NA	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	10/2014	45		none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	10/2014	340		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation, if any, is provided later in this report.

\*\* Specific information about Lead health concerns and sampling waiver is provided on page 4.

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic (ppb) *** Well 1 Well 3	2015 10/2015	2.6 2.6	ND – 2.6	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes. Test detection limit is 2.0 ppb
Barium (ppb)	10/2014	150		1000	2000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm) ****	10/2014	0.65		2	1	Erosion of natural deposits; discharge from fertilizer and aluminum factories ****
Nitrate as N Well 1 (ppm) Well 3	8/2015 9/2015	0.3 0.7		10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	10/2014	13		50	30	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Haloacetic Acids (ppb)	09/2013	<2.0		60	NA	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	08/2014	0.65		80	NA	By-product of drinking water disinfection
Gross Alpha Particle Activity (pCi/L)	05/2015	9.20		15	(0)	Erosion of natural deposits
Uranium (pCi/L)	05/2015	9.2		20	0.43	Erosion of natural deposits

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	10/2014	110		500	NA	Runoff/leaching from natural deposits, seawater influence
Sulfate (ppm)	10/2014	31		500	NA	Runoff/leaching from natural deposits, industrial wastes
Specific Conductance (microSiemens/cm)	2014	837	820 - 850	1600	NA	Substances that form ions when in water; seawater influence
Total Dissolved Solids TDS (ppm)	10/2014	470		1000	NA	Runoff/leaching from natural deposits
Foaming Agents - MBAS (ppb)	10/2014	< 50		500	NA	Municipal and industrial waste discharges
Turbidity (NTU)	10/2014	< 0.10		5	NA	Soil runoff
Color (units)	10/2014	< 5.0		15	NA	Naturally-occurring organic materials

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation, if any, is provided later in this report.

\*\*\* Specific information about arsenic in the drinking water is provided on page 4.

\*\*\*\* Fluoride is not added to the water at Varian Ranch.

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
None Detected in your water system					

\*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

### **Additional General Information on Drinking Water**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

#### **Lead and Copper:**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Varian Ranch MWC is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/lead>.

On September 23, 2008, Varian Ranch MWC received an exemption to the testing requirements for lead and copper from San Luis Obispo County Public Health department. Due to the universal use of water softeners or reverse osmosis devices in the dwellings at Varian Ranch, it is not possible to comply with the prescribed testing protocol for lead and copper sampling. In addition, all homes at Varian Ranch were built after 1985 when local building codes prohibited the use of lead pipes or the use of lead solder for home plumbing.

#### **Arsenic:**

While Varian Ranch drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

### **Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement**

Not Applicable for Varian Ranch MWC – No Violations exist